Chapter one

The First Chapter

Exercise 1 Compute the derivative of the following function:

$$f(x) = \sin((\sin x)^2)$$

The solution of this exercise is on page 4.

Exercise 2 Compute the derivative of the following function:

$$f(x) = \sin((\sin x)^2)$$

The solution of this exercise is on page 4.

Chapter two

The Second Chapter

Exercise 3 Compute the derivative of the following function:

$$f(x) = (x^2 + 1)\sqrt{x^4 + 1}$$

The solution of this exercise is on page 4.

2.1 Solutions of the Exercices

Solutions to the Exercises of Chapter two

Solution 1 The derivative is:

$$f'(x) = (\sin((\sin x)^2))' = \cos((\sin x)^2) \cdot 2 \sin x \cos x$$

Exercise 1 is on page 1.

Solution 2 The derivative is:

$$f'(x) = (\sin((\sin x)^2))' = \cos((\sin x)^2) \cdot 2 \sin x \cos x$$

Exercise 2 is on page 1.

Solutions to the Exercises of Chapter two

Solution 3 The derivative is:

$$f'(x) = ((x^2+1)\sqrt{x^4+1})' = 2x\sqrt{x^4+1} + \frac{2x^3(x^2+1)}{\sqrt{x^4+1}}$$

Exercise 3 is on page 3.